

1ST AND 2ND COPIES										100 AND 2TH COPIES									
PROCESSES AND PROPERTIES INDEX																			
<p><i>m</i></p> <p>White and Black Electrolytic Silver. A. V. Pamylov and O. S. Fedorova (Zhurnal Obshchei Khimii [J. General Chem.], 1935, 8, 1531-1537; C. Abstr., 1936, 30, 3501).—[In Russian.] Experiments on conditions under which white and black modifications of silver are deposited electrolytically and the transformation of one modification into another takes place were carried out with aqueous silver nitrate, between platinum electrodes, with current density 0.01-0.3 amp./cm.² and silver nitrate concentration 0.001N and 0.1N. The higher the current density the darker the colour of the deposit, in the more dilute solutions, and the slower the change from dark to light colour in the more concentrated solutions. On addition of 0.001% gelatin to the solutions the deposits become darker and the colour more stable.—S. G.</p>																			
434-15A METALLURGICAL LITERATURE CLASSIFICATION										RESEARCH REPORT									
FROM SYNDICATE										FROM SOURCE									
1935-36										1937-38									
1939-40										1941-42									
1943-44										1945-46									
1947-48										1949-50									
1951-52										1953-54									
1955-56										1957-58									
1959-60										1961-62									
1963-64										1965-66									
1967-68										1969-70									
1971-72										1973-74									
1975-76										1977-78									
1979-80										1981-82									
1983-84										1985-86									
1987-88										1989-90									
1991-92										1993-94									
1995-96										1997-98									
1999-00										2001-02									
2003-04										2005-06									
2007-08										2009-10									
2011-12										2013-14									
2015-16										2017-18									
2019-20										2021-22									
2023-24										2025-26									
2027-28										2029-30									
2031-32										2033-34									
2035-36										2037-38									
2039-40										2041-42									
2043-44										2045-46									
2047-48										2049-50									
2051-52										2053-54									
2055-56										2057-58									
2059-60										2061-62									
2063-64										2065-66									
2067-68										2069-70									
2071-72										2073-74									
2075-76										2077-78									
2079-80										2081-82									
2083-84										2085-86									
2087-88										2089-90									
2091-92										2093-94									
2095-96										2097-98									
2099-00										2101-02									
2103-04										2105-06									
2107-08										2109-10									
2111-12										2113-14									
2115-16										2117-18									
2119-20										2121-22									
2123-24										2125-26									
2127-28										2129-30									
2131-32										2133-34									
2135-36										2137-38									
2139-40										2141-42									
2143-44										2145-46									
2147-48										2149-50									
2151-52										2153-54									
2155-56										2157-58									
2159-60										2161-62									
2163-64										2165-66									
2167-68										2169-70									
2171-72										2173-74									
2175-76										2177-78									
2179-80										2181-82									
2183-84										2185-86									
2187-88										2189-90									
2191-92										2193-94									
2195-96										2197-98									
2199-00										2201-02									
2203-04										2205-06									
2207-08										2209-10									
2211-12										2213-14									
2215-16										2217-18									
2219-20										2221-22									
2223-24										2225-26									
2227-28										2229-30									
2231-32										2233-34									
2235-36										2237-38									
2239-40										2241-42									
2243-44										2245-46									
2247-48										2249-50									
2251-52										2253-54									
2255-56										2257-58									
2259-60										2261-62									
2263-64										2265-66									
2267-68										2269-70									
2271-72										2273-74									
2275-76										2277-78									
2279-80										2281-82									
2283-84										2285-86									
2287-88										2289-90									
2291-92										2293-94									
2295-96										2297-98									
2299-00										2301-02									
2303-04										2305-06									
2307-08										2309-10									
2311-12										2313-14									
2315-16										2317-18									
2319-20										2321-22									
2323-24										2325-26									
2327-28										2329-30									
2331-32										2333-34									
2335-36										2337-38									
2339-40										2341-42									
2343-44										2345-46									
2347-48										2349-50									
2351-52										2353-54									
2355-56										2357-58									
2359-60										2361-62									
2363-64										2365-66									
2367-68										2369-70									
2371-72										2373-74									
2375-76										2377-78									
2379-80										2381-82									
2383-84										2385-86									
2387-88										2389-90									
2391-92										2393-94									
2395-96										2397-98									
2399-00										2401-02									
2403-04										2405-06									
2407-08										2409-10									
2411-12										2413-14									
2415-16										2417-18									
2419-20										2421-22									
2423-24										2425-26									
2427-28										2429-30									
2431-32										2433-34									
2435-36										2437-38									
2439-40										2441-42									
2443-44										2445-46									
2447-48										2449-50									
2451-52										2453-54									
2455-56										2457-58									
2459-60										2461-62									
2463-64										2465-66									
2467-68										2469-70									
2471-72										2473-74									
2475-76										2477-78									
2479-80										2481-82									
2483-84										2485-86									
2487-88										2489-90									
2491-92										2493-94									
2495-96										2497-98									
2499-00										2501-02									
2503-04										2505-06									
2507-08										2509-10									
2511-12										2513-14									
2515-16										2517-18									
2519-20										2521-22									
2523-24										2525-26									
2527-28										2529-30									
2531-32										2533-34									
2535-36										2537-38									
2539-40										2541-42									
2543-44										2545-46									
2547-48										2549-50									
2551-52										2553-54									
2555-56										2557-58									
2559-60										2561-62									
2563-64										2565-66									
2567-68										2569-70									
2571-72										2573-74									
2575-76										2577-78									
2579-80										2581-82									
2583-84										2585-86									
2587-88										2589-90									
2591-92										2593-94									
2595-96										2597-98									
2599-00										2601-02									
2603-04										2605-06									
2607-08										2609-10									
2611-12										2613-14									
2615-16										2617-18									
2619-20										2621-22									
2623-24										2625-26									
2627-28										2629-30									
2631-32										2633-34									
2635-36										2637-38									
2639-40										2641-42									
2643-44										2645-46									
2647-48										2649-50									
2651-52										2653-54									
2655-56										2657-58									
2659-60										2661-62									
2663-64										2665-66									
2667-68										2669-70									
2671-72										2673-74									
2675-76										2677-78									
2679-80										2681-82									
2683-84										2685-86									
2687-88										2689-90									
2691-92										2693-94									
2695-96										2697-98									
2699-00										2701-02									
2703-04										2705-06									
2707-08										2709-10									
2711-12										2713-14									
2715-16										2717-18									
2719-20										2721-22									
2723-24										2725-26									
2727-28										2729-30									
2731-32										2733-34									
2735-36										2737-38									
2739-40										2741-42									
2743-44										2745-46									
2747-48										2749-50									
2751-52										2753-54									
2755-56										2757-58									
2759-60										2761-62									
2763-64										2765-66									
2767-68										2769-70									
2771-72										2773-74									
2775-76										2777-78									
2779-80										2781-82									
2783-84										2785-86									
2787-88										2789-90									
2791-92										2793-94									
2795-96										2797-98									
2799-00										2801-02									
2803-04										2805-06									
2807-08										2809-10									
2811-12										2813-14									
2815-16										2817-18									
2819-20										2821-22									
2823-24										2825-26									
2827-28										2829-30									
2831-32										2833-34									
2835-36										2837-38									
2839-40										2841-42									
2843-44										2845-46									
2847-48										2849-50									
2851-52										2853-54									
2855-56										2857-58									
2859-60										2861-62									
2863-64										2865-66									
2867-68										2869-70									
2871-72										2873-74									
2875-76										2877-78									
2879-80										2881-82									
2883-84										2885-86									
2887-88										2889-90									
2891-92										2893-94									
2895-96										2897-98									
2899-00										2901-02									
2903-04										2905-06									
2907-08										2909-10									
2911-12										2913-14									
2915-16										2917-18									
2919-20										2921-22									
2923-24										2925-26									
2927-28										2929-30									
2931-32										2933-34									
2935-36										2937-38									
2939-40										2941-42									
2943-44										2945-46									
2947-48										2949-50									
2951-52										2953-54									
2955-56										2957-58									
2959-60										2961-62									
2963-64										2965-66									
2967-68										2969-70									
2971-72										2973-74									
2975-76										2977-78									
2979-80										2981-82									
2983-84										2985-86									
2987-88										2989-90									
2991-92										2993-94									
2995-96										2997-98									
2999-00										3001-02									
3003-04										3005-06									
3007-08										3009-10									
3011-12										3013-14									
3015-16										3017-18									
3019-20										3021-22									
3023-24										3025-26									
3027-28										3029-30									
3031-32										3033-34									
3035-36										3037-38									
3039-40										3041-42									
3043-44										3045-46									
3047-48										3049-50									
3051-52										3053-54									
3055-56										3057-58									
3059-60										3061-62									
3063-64										3065-66									
3067-68										3069-70									
3071-72										3073-74									
3075-76										3077-78									
3079-80										3081-82									
3083-84										3085-86									

16

Morphology of pigments. IV. Microscopy of carbon black. A. V. Pamirov and O. S. Fedorova. *J. Gen. Chem.* (U. S. S. R.) 6, 645-6 (1935); cf. *C. A.* 29, 3327²; 30, 5617².—While microscopic exam. of charcoal black makes it possible to distinguish gas black from other forms of C black according to the character of distribution in rubber, it is impossible to distinguish various grades of gas black and lampblack from one another. Methods of sample prepns. and examn. are described. C. B.

430.554 METALLURGICAL LITERATURE CLASSIFICATION

1336 62-179
62.171 Sm. Cmp. 51

<p>BC</p> <p>B-II-8</p> <p>Abstract of the paper by V. I. Zhuravskiy of results of experimental determination of the degrees of deformation of V. I. Zhuravskiy and O. B. Fedorova (Sov. Metallurg, Moscow 1977, 50, 1478- 1480; O. B., 1977, 50, 1478-1480). The effective diameter of the particles on the arithmetic mean is referred to the way of more complicated expressions: R. T. 1</p>	
<p>ASR-514 METALLURGICAL LITERATURE CLASSIFICATION</p>	
<p>1978-1979</p>	<p>1978-1979</p>
<p>1978-1979</p>	<p>1978-1979</p>

BC

B-7-4

Furnace of metals deposited at the cathode.
O. S. Ponomova (*J. Gen. Chem. Russ.*, 1938, 8, 1711—
1716).—Metals are classified into 4 groups, according
to their tendency to form smooth (Cu, Fe, Co), spongy
(Ce, Co, Ag), or microcryst. (Ag, Pb, Cd, Zn, Cu,
Fe) cathode deposits, or deposits containing oxides
(Ni, Mn, Cr).

R. T.

A.M.S.A. METALLURGICAL LITERATURE CLASSIFICATION

Morphology of pigments. XII. The method of micro-
scopic determination of the degree of dispersion. A. V.
Pavlov and O. S. Podgorny. *J. Applied Chem.* (U. S.
S. R.) 11, 406 (in French 404) (1948); cf. *C. A.* 32,
3067. Choice of medium, which provided a max. dis-
persion of pigment, the best distribution of pigment (by
means of brush or glass-rod) in this medium and
standardization of the technic of calx. the diam. of the
particles are necessary conditions for the detn. Nine
references. A. A. Podgorny

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
<p><i>BC</i> <i>A-1</i></p> <p>Drop analysis. O. S. FIDOROVA (Trans. Ivanovo Chem. Tech. Inst., 1959, 40-42).—The drop reaction for Pb using a mixture of K_2SnI_6 and $Cd(NO_3)_2$ is improved by substituting $H_2C_2O_4$ for $Cd(NO_3)_2$. A modification of the Mo-blue test for detecting Sb in presence of Sn is described. R. C.</p>																			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																			
1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									

FEDOROVA, O. S.

Determination of Instability Constants of Complex Compounds of Metals with Thiourea by the Polarographic Method. I. Lead and Cadmium, Page 206, Sbornik statey po obshchey khimii (Collection of Papers on General Chemistry), Vol I, Moscow-Leningrad, 1953, pages 762-766

Ivanovo Chemico-Technological Inst

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271(

USSR/Chemistry - Analysis

Card 1/1 Pub. 151 - 11/36

Authors : Fedorova, O. S.

Title : Composition and instability constants of complex metal-thiourea compounds determined by the polarographic method. Part 2.-

Periodical : Zhur. ob. khim. 24/1, 62-64, Jan 1954

Abstract : The structure and stability of Zn, Ni and Bi complexes were polarographically investigated at a pH of about 0.35. A reduction in stability followed by a reduction in the covalent properties of various metal ions during their contact with thiourea was established. The coordination number and the instability constants of a Bi-thiourea complex were determined. The reversibility of the Bi ion discharge process was determined on the basis of experimental data. Six USSR references (1949-1953). Tables; graph.

Institution : The Chemical-Technological Institute, Ivanovo

Submitted : July 4, 1953

FEDOROVA, O.V.

[From every hen, 152 eggs] 152 imitsa ot kashdoi kuritsy.
[Leningrad] Leningradskoe gazetno-zhurnal'noe i knizhnoe
izd-vo, 1955. 36 p. (MLRA 10:6)
(Eggs--Production)

ACCESSION NR: AP4028545

S/0191/64/000/004/0020/0023

AUTHOR: Kerber, M. L.; Fedotova, O. Ya.; Losev, I. P. (Deceased)

TITLE: Radiation resistance of aromatic and arylaliphatic polyamides

SOURCE: Plasticheskiye massy*, no. 4, 1964, 20-23

TOPIC TAGS: aromatic polyamide, aliphatic polyamide, arylaliphatic polyamide, radiation resistance, gamma irradiation, thermomechanical property, molecular weight, specific viscosity, polyterephthalamide, cross linkage

ABSTRACT: The radiation resistance of aromatic, aliphatic, and arylaliphatic polyamides was investigated. The radiation resistance of polyamides (poly-p-phenyleneterephthalamide, poly-p-phenylenesebacinamide, polydiphenylmethaneterephthalamide, polyditolylmethaneterephthalamide and poly[N, N-dimethyl-((diphenylmethane)-terephthalamide)]) was determined by the change in molecular weight (specific viscosity) and the thermomechanical properties under the effect of Co-60 gamma irradiation. The polyterephthalamides are most resistant

Card 1/2

ACCESSION NR: AP4028545

to gamma radiation; they are also resistant to oxidative destruction at 200C. The predominance of the destruction processes shows up at different integral doses depending on the structure of the backbone of the aromatic polyamides. The parallel course of the processes of degradation and cross linking of polyamides by gamma radiation in air was thus confirmed. Exchanging the aromatic group of the amide for an aliphatic or arylaliphatic reduces the radiation resistance of the polymer. Orig. art. has: 4 figures

ASSOCIATION: None

SUBMITTED: 00

ATD PRESS: 3067

ENCL: 00

SUB CODE: 00, NP

NO REF SOV: 008

OTHER: 006

Card 2/2

ACCESSION NR: AT4033998

S/0000/63/000/000/0139/0144

AUTHOR: Fedotova, O. Ya.; Shtil'man, M. I.; Losev, I. P. (Deceased); Bogdanova, V. M.; Zetentskaya, T. V.

TITLE: Synthesis and conversion of polyamide polynitriles. 1. Synthesis of N-cyanoethylated polyamides

SOURCE: Geterctsepnnye vyssokomolekulyarnye soyedineniya (Heterochain macromolecular compounds); sbornik statey. Moscow, Izd-vo "Nauka," 1963, 139-144

TOPIC TAGS: polymer, polyamide, cyanoethylation, cyanoethylated polyamide, solution polycondensation, interphase polycondensation, aromatic diamine, aliphatic diamine, dicyanoethylated aromatic diamine, adipic acid, dicarboxylic acid, polynitrile

ABSTRACT: The authors claim original synthesis of N-cyanoethylated polyamides by solution or interphase polycondensation of N,N'-di-(β -cyanoethyl)-p-phenylene diamine or N,N'-di-(β -cyanoethyl)-1,6-hexamethylene diamine with adipic acid or its dichloroanhydride. Solution reactions lasted 7-10 hours (5 hrs. in O purified N flow, 2-5 hours in a vacuum) at 160-220C, interphase reactions 30 min. at 180-240C. It was established that N-cyanoethylated polyamides with a predetermined nitrile group content can be derived at polycondensation solution temperatures not

Card

ACCESSION NR: AT4033998

exceeding 160C. Dicyanoethylated aromatic diamines fall almost entirely to participate in the interphase polycondensation, although their aliphatic counterparts react with the dichloroanhydrides of dicarboxylic acids at phase separation boundaries. Orig. art. has: 5 graphs, 2 tables and 4 chemical equations.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii Institut im. D. I. Mendeleeva (Moscow Institute of Chemical Technology)

SUBMITTED: 12Sep62

DATE ACQ: 30Apr64

ENCL: 00

SUB CODE: OC

NO REF SOV: 003

OTHER: 000

Card 2/2

FEDOROVA, P., tekhnik

Improving the design of the NII-200 lifting-jack. Stroitel' no.1:14
Ja '59. (MIRA 1243)

(Hydraulic jacks)

YES'KINA, T.M., (Arzamasskaya oblasti); FEDOROVA, P.G., (Voroshilovgrad);
KOSHINA, M.I., (Stavropol'); BOSNOVIK, I.Ya., doktor meditsinskikh
nauk (Moskva); STEPANOVA, P.D., starshaya meditsinskaya sestra (Sochi)

Work of the council of nurses. T.M. Yes'kina and others. Med. sestra
no.1:24-27 Ja. '56. (MLRA 9:3)

1. Predsedatel' Soveta meditsinskikh sester (for Yes'kina, Fedorova,
Koshina)
(NURSES AND NURSING)

FEDOROVA, P.I., kandidat meditsinskikh nauk

Achrestic anemia. Terap. arkh. 26 no.2:74-77 Mr-Ap '54. (MIRA 7:8)

1. Is gosital'noy terapevticheskoy kliniki (dir. chlen-korrespondent AMN SSSR prof. Z.I.Umidova) Tashkentskogo meditsinskogo instituta imeni V.M.Molotova.

(ANEMIA, HYPERCHRONIC,
*achrestic)

FEDOROVA, P.I.

T-5

USSR/General Problems of Pathology - Tumors.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 17424

Author : ~~Fedorova, P.I.~~

Inst :

Title : On Acute Erythremia and Erythroleukemia.

Orig Pub : Terapevt. arkhiv, 1956, 23, No 8, 72-74

Abstract : Two cases of acute disease are reported in 16 and 18-year old males, characterized by high fever, lymphadenopathy, hepatosplenomegaly, progressing anemia, elevated ESR, thrombocytopenia and phenomena of hemorrhagic diathesis. In one patient the number of hemocytoblasts in peripheral blood reached 82.5% with a white cell count up to 60,000 per cu mm. There were 68 normoblasts, predominantly orthochromatic, per 100 white cells, and a hemocytoblastic bone marrow. The other patient had 142 erythroblasts (57 proerythroblasts, 25 megaloblasts and 60 normoblasts) per 100 white cells; of them "paraerythroblasts"

Card 1/2

FEDOROVA, P.I.

Blood gases in thyrotoxicosis in hot climates. Izv. AN Uz.
SSR. Ser. med. no. 2:23-27 '58. (MIRA 12:5)

1. Tashkentskiy gosudarstvennyy meditsinskiy institut.
(THYROID GLAND--DISEASES) (BLOOD, GASES IN)

FEDOROVA, P.I., kand.med.nauk

Some aspects of central nervous function in thyrotoxicosis in a hot climate. Terap. arkh. 30 no.4:81-91 Ap '58. (MIRA 11:4)

1. Iz gosspital'noy terapevticheskoy kliniki (dir.-chlen-korrespondent AMN SSSR prof. Z.I.Umidova) Tashkentskogo meditsinskogo instituta.

(CENTRAL NERVOUS SYSTEM, physiology.

in hyperthyroidism in hot climate (Rus)

(HYPERTHYROIDISM, physiology.

CNS, in hot climate (Rus)

(CLIMATE,

CNS funct. in hyperthyroidism in hot environment (Rus)

[✓]
~~FEDOROVA~~, P.I. kand.med.nauk, dotsent (Tashkent)

Topography of skin temperature in thyrotoxicosis patients. Probl.
endok.i gorm. 5 no.5:67-72 8-0 '59. (MIRA 13:5)

1. Iz kafedry gosital'noy terapii (zav. - chlen-korrespondent
AMN SSSR prof. Z.I. Umidova) lechebnogo fakul'teta Tashkentskogo
gosudarstvennogo meditsinskogo instituta.
(HYPERTHYROIDISM physiol.)
(BODY TEMPERATURE)

FEDOROVA, P. I., Doc Med Sci -- "Basedow's disease under
hot-climate conditions. (Clinical ^{and} physiological study)."
Tashkent, 1961. (Min of Health UzSSR. Tashkent State Med
Inst) (KL, 8-61, 258)

- 423 -

FEDOROVA, P.I.; AVAKIMOVA, L.A., red.; TSAY, A.A., tekhn. red.

[Thyrototoxicosis (Basedow's disease) in a hot climate]
Tireotoksikoz (basedova bolezni) v usloviakh zharkogo
klimata. Tashkent, Medgiz UzSSR, 1963. 194 p.
(MIRA 17:3)

ANTIPOV, V.G. [Antsipau, V.H.]; FEDOROVA, R. [Fiodarava, R.]

Coniferous exotic plants in Kaliningrad Province. Vestsi AN
BSSR. Ser. bial. nav. no.4:34-39 '63. (MIA 17:8)

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271(

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271(

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271(

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271(

Fedorova R.G.
FEDOROVA, R.G.

Contrast examination of the unchanged heart and large vessels in anterior projection with the patient in a horizontal position.
Khirurgiia 33 no.12:60-65 D '57. (MIRA 11:2)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. A.N. Bakulev) i kafedroy rentgenologii i radiologii (zav. - prof. V.A. D'yachenko) II Moskovskogo gosudarstvennogo meditsinskogo instituta imeni N.I.Pirogova.

(CARDIOVASCULAR SYSTEM, radiography
anterior projection of heart & large vessels in horizontal position)

FEDOROVA, R.G., Cand Med Sci -- (diss) "Contrast study
of the unchanged heart and ^{myocardial} ~~major~~ vessels with the patient
in the horizontal position." Mos 1958 12 pp. (Second Mos
State Med Inst im N.I. Pirogov) 200 copies (KL, 21-58, 93)

- 73 -

~~FEDOROV~~ R.G.

IVANITSKAYA, M.A.; FEDOROVA, R.G.

Angiocardiographic examination of the unchanged heart and main vessels [with summary in English]. Vest.rentg. 1 rad. 33 no.1:6-12 (MIRA 11:4)
Ja-P '58.

1. Iz fakul'tetskoy khirurgicheskoy kliniki imeni S.I. Spasokukotskogo (zav.-prof. A.N. Bakulev) i iz kafedry rentgenologii (zav.-prof. V.A. D'yachenko) II-go Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.

(ANGIOCARDIOGRAPHY,

in normal cond. (Rus)

(ANGIOGRAPHY,

great vessels, in normal cond. (Rus)

FREYDLIN, L.Kh.; SLADKOVA, T.A.; KUDRYAVTSEV, G.I.; SHEYN, T.I.; AIL'BERMAN,
Ye.N.; FEDOROVA, R.G.

Catalytic hydrogenation of aromatic nitriles and the properties of
polyamides obtained from p-(β,β' -diaminodiethylbenzene). Izv. AN
SSSR. Otd.khim.nauk no.9:1713-1715 S '61. (MIRA 14:9)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR i
Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.
(Nitriles) (Hydrogenation) (Polyamides)

KHOMYAKOV, Yu.S.; FEDOROVA, R.G.

Diagnosis of multiple primary malignant tumors. Sov. med.
25 no.2:121-123 F '62. (MIRA 15:3)

1. Iz kafedry rentgenologii i radiologii (zav. - prof. V.A.
D'yachenko) II Moskovskogo meditsinskogo instituta imeni N.I.
Pirogova.

(CANCER—DIAGNOSIS)

FEDOROVA, R.G. (Moskva, I-45, Pechatnikov pereulok, d.21, kv.21)

Change in the tracheal bifurcation angle in mitral stenosis;
X-ray observations. Grud. khir. 5 no.5:15-18 S-0 '63.

(MIRA 17:8)

1. Iz kafedry rentgenologii i radiologii (zav. - prof. V.A.
D'yachenko) II Moskovskogo meditsinskogo instituta imeni
Pirogova.

FEDOROVA, R.I.

New developments in the organization of shoe production on a
conveyer line. Kozh.-obuv.prom. 4 no.4:6 Ap '62. (MIRA 15:5)
(Shoe manufacture) (Assembly-line methods)

ISAGULYANTS, V.I., akademik; POREDDA, Z.; FEDOROVA, R.I.

Synthesis of γ -nitrocarboxylic acids and their esters using ion exchange resins as catalysts. Dokl. AN Arm. SSR 36 no.1:31-34 '63.
(MIRA 17:1)

1. Akademiya nauk Armyanskoy SSR (for Isagulyants).

FEDOROVA, R.I.

The effect of ultraviolet radiation upon microorganisms as a main external factor of cosmic medium

Report to be submitted for the 4th International Space Science Symposium (COSPAR) Warsaw, 2-12 June 63

UDALOVA, T.P.; FEDOROVA, R.I.

Effect of various nutrients on the gramicidin formation by *Bacillus brevis* var. G.-B. Mikrobiologiya 34 no.4:631-635 J1-Ag '65. (MIRA 18:10)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova.

FEDOROVA, R

X

Spravochnik po matematicheskim tablitsam (iy) A.7.
Lebedev (i) R.H. Fedorova. Moskva, Akademiya, 1956.
xLvi, 549 p.

At head of title: Akademiya Nauk SSSR. Institut
Tehnicheskoy Mekhaniki i Vychislitel'noy Tekhniki.
Bibliography: p. 411-536.

FEDOROVA, R

K

A guide to mathematical tables, by A.V. Lebedev and
R.M. Fedorova. New York, London, Pergamon Press,
1960.

xlvi, 506 p.

Translated from the original Russian: Spravochnik
po matematicheskim tablitsam, Moscow, 1956.

References: p. 411-586.

LUZAN, P.P.; Primalni uchastiye: FEDOROVA, R.I.; LISTOVNICHAYA, S.P.;
SHEVCHENKO, R.V.

Effect of pig iron properties on the porosity of the working
surface of tractor liners. Lit. proizv. no.6:27-29 Je '61.
(MIRA 14:6)

1. Tsentral'naya zavodskaya Laboratoriya zavoda im. Lipse (for
Fedorova, Listovnichaya, Shevchenko).
(Cast iron—Metallography)

... in which certain characteristics of the tables
are presented (number of digits in the functional values
range and interval ...)
[reference to the tables: " a bibliography ...] //

I have never in my life been so sad as I am right now. I hope you will
continue to post I wish names and details of the scheme

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271(

FEDOROVA, R. N.

Isotopy of surfaces of the 2d order in Lobachevskii's geometry.
Sob. AN Gruz. SSR 20 no. 2:137-142 F '58. (MIRA 11:7)

1. Predstavleno chlenom-korrespondentom AN GruzSSR G.S.Chogoshvili.
(Surfaces)
(Geometry, Infinitesimal)

BROVENKO, V.Ya.; KALININA, O.F.; MARKINA, O.T.; PETROV, G.M.; FEDOROVA, R.T.

Right ascensions of bodies of the solar system determined from
observations with the Freiberg-Kordrat'ev transit circle in Nikolayev
in 1961. Izv. GAO 23 no.4:82-90 '64. (MIRA 17:9)

IVAKINA, T.Ya.; KALIKHEVICH, F.F.; FEDOROVA, R.T.

Results of photographic observations of minor planets at Nikolaev.
Bibl. Inst. teor. astron. 10 no.2:164-170 '65. (MIRA 18:7)

S/081/62/000/016/022/043
B168/B186

AUTHORS: Fedorova, R. V., Kogan, M. I., Belova, O. D.

TITLE: Vapor-phase condensation of acetone with formaldehyde in methylvinylketone. Summary

PERIODICAL: Referativnyy zhurnal: Khimiya, no. 16, 1962, 384, abstract 16L11 (Tr. Vses. n.-i. vitamin. in-t, v. 7, 1961, 54-59)

TEXT: The authors studied the production of methylvinylketone (I) by condensation of industrial formalin (II) and chemically pure acetone (III). This was achieved by a vapor-phase reaction on higher oxides of rare earths, acid clays (e.g. gumbrin, kill) and industrial catalysts (e.g. Cd-Ca phosphate, Ca phosphate), performed, in a flow type laboratory apparatus at from 280 to 450-500°C (< 400°C preferable) at volume velocities from 100 to 1000-2000 l gaseous III per 1 l catalyst per hour, with 45-50 ml catalyst and a molar ratio of II : III = 1 : 1. The composition of the reaction mixture was determined analytically (e.g. I by Kaufman's method, II by reaction with dimedon, etc.), and that of gaseous products with a BTM-2 (VTI-2) gas analyzer. Catalysts are listed, and the

Card 1/2

Vapor-phase condensation of...

S/081/62/000/016/022/043
B168/B186

following respective values are given for optimum reaction temperature in °C, yield of I per throughput of III in %, yield of I per input of I into the reaction in %, productivity in g per 1 l catalyst per hr : Ca phosphate, 420, 26.6, 93.7, 306; higher oxides of rare earths, 375-380, 36, 100, 325; higher oxides of rare earths on a carrier, 515, -, ~100, 565; silica gel, promoted with KOH, -, 39.1, ~100, 22. Graphs are given for productivity of I depending on temperature, catalyst and volume velocity.
[Abstracter's note: Complete translation.]

✓

Card 2/2

FEDOROVA, R.V.

Distribution of grain pollen by air. Dokl. AN SSSR 107 no. 6: 897-898
Ap '56. (MLRA 9:8)

1. Institut geografii Akademii nauk SSSR. Predstavleno akademikom
V.N. Sukachevym.

(Pollen) (Grain)

1. FEDOROVA, R. V.
2. USSR (600)
4. Peat Bogs - Mozhaysk District
7. Origin of the "Toporkovskoye" peat bog in the Mozhaysk District of the Moscow Province. Trudy Geog. st. "Krasnovidovo" no. 1, 1948.
9. Monthly List of Russian Accessions, Library of Congress, March 1953.
Unclassified.

FEDOROVA, R.

Works on the All-Union Peat Institute, (Min of Agri, RSFSR)

Number 5, 1933, 103 pages, A Compendium of Instructions on the Study of Peat
& Peat Bogs:

Part 2. Field Geobotanical Studies:

"Brief Instructions on Determining the Amount of Stumps in Peat Bogs" by
Kobzikov and Fedorova, R.

SO: Botanicheskiy Zhurnal, Vol XXXV, No 1, pp 100-110, Jan-Feb 1950, Russian
bimo per, Moscow/Leningrad (U5511, 12 Feb 1954).

610 248

551.583.3-581.16 551.556.4-581.16

*Fedotova, B. V. Kolichestvennye zakonomernosti v rasprostraneni prirody datsa
Quantitative regularities in the distribution of natural data

193-202. Malignina, E. A., *Opyt sopostavleniya rasprostraneniya pylytsy nekotorykh drevesnykh porod s ikh arealami v predelakh Evropeiskoi chasti SSSR*. (Comparison of pollen distribution of some woody species with their areal expansion over European part of the U.S.S.R.) *Izv. Vsesoyuzn. nauch. tsentra Akad. Nauk SSSR*, 1964, No. 1, p. 256-270, 114 figs., p. 269-270. Monastov, M. Kh., *Opisaniye pylytsey vidov polynel, proizrastayushchikh na territorii SSSR (dlya teley pylytsevoogo analiza)*. (Description of pollen in varieties of wormwood growing in the U.S.S.R.) *Izv. Vsesoyuzn. nauch. tsentra Akad. Nauk SSSR*, 1964, No. 1, p. 271-288, 148 figs., p. 271-288. This monograph contains a tremendous amount of quantitative data on the pollen of 100 species of wormwood growing in the USSR, and includes the results of pollen analysis of the same species in Central Europe and Scandinavia. The book is intended for specialists in the field of paleobotany, paleogeography and paleoclimatology.

194. The other articles speak of pollen dispersal in relation to climate changes on various geologic scales. No. 195. The coverage of literature on dispersal is rather meagre.

2. Pollen dispersal by wind & Aerobiology & Quantitative

FEDOROVA, R. V.

"Problem Concerning the Propagation of Hornbeam and White Beech (*Carpinus*) in Post-Glacial Times in European USSR," Problemy Fizicheskoy Geografii (Problems of Physical Geography), Vol. 16, Symposium, Moscow, 1951.

U-1483, 25 Sept 51

FEDOROVA, R. V.

"Paleobotanic Research in Estuary Deposits of the Caspian Depression," Trudy
Inst. geog., AN SSSR, No.50, 1951

"History of the Buzuluk Pine Woods Based on a Spore-Pollen Analysis of the
Peat Bog 'Pobochnoye'," ibid.

"Influence of Conditioning Methods on the Size of Pollen Grain of Various
Species of Pinus," ibid.

FEDOROVA, R.V.

Dispersal of pollen and spores by running waters. Trudy Inst.geog.
no.52:46-72 '52. (MIRA 7:1)

(Pollen, Fossil)

FEDOROVA, R.V.

Quantitative regularities in the dispersal of tree pollen by wind.
Trudy Inst.geog. no.52:91-103 '52. . (MIRA 7:1)

(Pollen)

1. FEDOROVA, R. V.
2. USSR (600)
4. Pollen
7. "Data on the drift of arboreal pollen north of the timber line." Tikhomirov, B.A.
Izv. Vses. geog. obshch. 84 no.5, 1952
9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

FEDOROVA, R.V.

Dissertation: "Forest Phases in the Plant Cover of the Yergeny Mountains and Stavropol' in the Late Holocene (According to the Data of Spore-Dust Analysis)." Cand Geog Sci, Inst of Geography, Acad Sci USSR, Moscow, 1953. (Referativnyy Zhurnal Geologii Geografiya, Moscow, Aug 54)

SO: SUM 393, 28 Feb 1955

FEDOROVA, R.V.

On the origin of knolly bogs. Bot.zhur. 38 no.4:584-589 J1-Ag '53.
(MLRA 6:9)

1. Institut geografii Akademii nauk SSSR, Moskva. (Peat bogs)

FEDOROVA, R.V.

Forest phases in the Yergeni Hills and Stavropol Plateau during
the late Holocene period. Trudy Inst. geog. no.63:57-127 '55.
(MIRA 8:6)

(Yergeni Hills--Pollen, Fossil) (Stavropol Plateau--Pollen,
Fossil) (Yergeni Hills--Spores (Botany), Fossil) (Stavropol
Plateau--Spores (Botany), Fossil)

FEDOROVA, R.V.

Atmospheric dispersal of pollen of certain grassy plants.
Izv.AN SSSR Ser.geog.no.1:104-109 Ja-F '56. (MLRA 9:7)

1.Institut geogr.fiz. AN SSSR.
(Pollen)

GRICHUK, V.P.; FEDOROVA, R.V.

Characteristics of periglacial vegetation of the Quaternary period
in the north of the Asiatic Continent. Izv.AN SSSR, Ser.geog. no.2:
66-71 Mr-Apr '56. (MLBA 9:8)

1. Institut geografii AN SSSR.
(Asia--Paleobotany)

FEDOROVA, R.V.

Distribution of grain pollen by air. Dokl.AN SSSR 107 no.6:897-898
Ap '56. (MLRA 9:8)

1. Institut geografii Akademii nauk SSSR. Predstavleno akademikom
V.N. Sukachevym.
(Pollen) (Grain)

FEDOROVA, R.V.

~~_____~~
Differences between pollens of wild and cultivated grasses. Dokl.
AN SSSR 108 no.1:153-155 My '56. (MIRA 9:8)

1. Institut geografii Akademii nauk SSSR. Predstavleno akademikom
V.N. Sukachevym.
(Grasses) (Pollen) (Grain)

FEDOROVA, R.V.

"Recent trends in palynology" [in English] by K.Faegri. Reviewed
by R.V. Fedorova, Bot. zhur. 43 no.7:1054-1056 J1 '58. (MIRA 11:9)

1. Institut geografii Akademii nauk SSSR, Moskva.
(Palynology)
(Faegri, K.)

FEDOROVA, Raisa Vasil'yevna, kand.geograf.nauk; SHCHERBINOVSKAYA,
T.N., red.; NOGINA, N.I., tekhn.red.

[Searchers of the sun's treasures] Iskateli solnechnykh kladov.
Moskva, Gos.izd-vo geogr.lit-ry, 1959. 183 p. (MIRA 13:3)
(Russia, Northern—Description and travel)

FEDOROVA, R.V.

Dispersal of birch pollen by air. Trudy Inst.geog. 77:139-144
'59. (MIRA 13:5)

(Pollen--Dissemination) (Birch)

FEDOROVA, R.V.

Dissemination of the pollen of gramineous plants by air. Trudy
Inst.geog. 77:145-156 '59. (MIRA 13:5)
(Pollen--Dissemination) (Grasses)

PUMINOV, A.P.; FEDOROVA, B.V.

Peat from the Fur Delta (northeastern part of the Central
Siberian Plateau). Trudy NIIGA 123:179-183 '61.

(MIRA 14:10)

(Fur Delta (Central Siberian Plateau--Peat bogs)

FEDOROVA, R.V.

Results of a study of peat deposits in the Chukchi Peninsula.
Izv. Sib. otd. AN SSSR no.12:120-127 '62. (MIRA 17:8)

1. Institut lesa i drevesiny Sibirskogo otdeleniya AN SSSR,
Krasnoyarsk.

KORZHUYEV, S.S.; FEDOROVA, R.V.

The Chekurovka mammoth and its life conditions. Dokl. AN SSSR
143 no.1:181-183 Mr. '62. (MIRA 15:2)

1. Institut geografii AN SSSR. Predstavleno akademikom
V.N.Sukachevym.

(Chekurovka Region—Mammoth)

FEDOROVA, R.V.; KHOTINSKIY, N.A.

Methodological conference of palynologists. Izv. AN SSSR. Ser.
geog. no. 2:152-153 Mr-Apr '63. (MIRA 16:4)
(Palynology--Congresses)

NAUMOVA, Ye.K., dots.; SHAMSUTDINOV, N.S., assistant; FEDOROVA, S.A.;
RYABOVA, N.I.; OSANOVA, V.P.; KOKSINA, K.D. (Kazan')

Fighting diphtheria in the country; abstract. Kaz.med.zhur.
no.1:113 Ja-F'61 (MIRA 16:11)

*

VORONOVA, N. A.; FEDOROVA, S. A.; TKACH, N. T.

Cast iron with bainite structure for making cylindrical pebbles.
Trudy Giprotsement no. 26:54-62 '63. (MIRA 17:5)

NEMSHILOVA, N.A. [deceased]; KULIKOVA, Ye.N.; VAYMAN, Ye.I.; YAKOBSON, D.A.;
KUZ'MINA, Yu.T.; FEDOROVA, S.A.; CSANGVA, V.P.; BLINOVA, L.L.;
RYABOVA, N.I.

Distribution of enteropathogenic Escherichia coli among various
population groups in Kazan and some cities of the Tatar A. S. S. R.
Zhur. mikrobiol., epid. i immun. 41 no.9:145-146 S '64. (MIRA 18:4)

1. Kazanskiy institut epidemiologii, mikrobiologii i gigiyeny i
Tatarskaya respublikanskaya sanitarno-epidemiologicheskaya
stantsiya, poliklinika No.2.

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271(

Microstructure of CAS: HIGH SPEED AIRCRAFT

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271(

FEDOROVA, S. A.
FEDROVA, S. A., DOGADKIN, B. A., SANDOVIRSKIY, D. M., KHELLEK, T. Y., TSVETKOV, A. J.,
BAKSHT, O. V., And RASHIVAHINA, K. Y.

"Oxidation of Buns in solution," a paper presented at the 9th Congress
on the Chemistry and Physics of High Polymers, 28 Jan-2 Feb 57, Moscow, Moscow
Polytechnic Institute.

B-3,084,395

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271(

FEDOROVA, S.A.

20-2-23/62

AUTHOR: Bunin, K.P., Koval'chuk, G.Z., Fedorova, S.A.

TITLE: On the Mechanism Underlying the Influence of Surface Oxidation upon the Graphitization of Iron Alloys (O mekhanizme vliyaniya poverkhnostnogo okisleniya na grafitizatsiyu zheleznykh splavov)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 115, Nr 2, pp. 281 - 283 (USSR)

ABSTRACT: Perlite wrought iron with 2,80 % C and 0,91 % Si served as initial material for the tests. The cylindrical samples (20 mm of diameter and 6 mm of height) were cut out from dense fragments. (These fragments had been cast at an elevated feed). When the samples are subjected to further graphitization at 700 °C, no new graphite inclusions form, but the carbon of the perlite cementite settles in layers in the form of graphite on the surface of the graphite inclusions occurring in iron. After 1, 2, 3, 5, 8, 15, 19 and 24 hours the samples were taken out of the furnace, cooled in the air and investigated under the microscope. The decrease in the quantity of cementite in graphitization was determined by chemical analysis and by measurement of the hardness and the coercive

Card 1/3

20-2-23/62

On the Mechanism Underlying the Influence of Surface Oxidation upon the Graphitization of Iron Alloys

forces. With the aid of these data the half life of the decomposition of the eutectoid cementite was determined, and the corresponding data summarized in a table. Two series of samples were investigated: As regards the samples of the first series their surface was cleaned of slags, the samples of the other series had in the initial state an oxidized surface.

On the oxidation of the samples the graphitization is also greatly increased in the case that the number of graphite inclusions is not increased. The data obtained here can easily be explained when the nature of the oxidation is brought into connection with the increase in the equilibrium concentration of the vacancies in the surface zone (due to the "facilitated" distance of the surface ions of iron in the presence of oxide layers). With increasing gradient of the concentration of the vacancies their diffusion into the depth is accelerated. The speed of the diffusion-like transfer into the interior can be strongly influenced by variation of the character of the outer medium and by modification of the surface concentration. There are 1 table and 5 Russian references.

Card 2/3

20-2-23/62

On the Mechanism Underlying the Influence of Surface Oxidation upon the Graphitization of Iron Alloys

ASSOCIATION: Institute of Ferrous Metallurgy Academy of Sciences, Ukrainian SSR
(Institut chernoy metallurgii Akademii nauk USSR)

PRESENTED BY: G.V. Kudryumov, Academician, March 9, 1957

AVAILABLE: Library of Congress

Card 3/3

FEPOKOV, S. A.

SOV/21-58-10-10/27

AUTHORS: Bunin, K.P., Corresponding Member of the AS UkrSSR, Voytas-
lenok, S.L. and Fedorova, S.A.

TITLE: The Eutectoid Transformation of Austenite in Malleable Cast
Iron (Eutektoidnoye prevrashcheniye austenita v kovkom chu-
gune)

PERIODICAL: Dopovidi Akademii nauk Ukraini's'koi RSR, 1958, Nr 10,
pp 1070 - 1074 (USSR)

ABSTRACT: The present investigation was initiated to obtain, experi-
mentally, quantitative data as to the position of various
lines in the process of eutectoid transformation of auste-
nite in malleable cast iron. The cast iron contained 2.90%
C; 0.88% Si; 0.36% Mn and 0.09% S. The time needed for the
beginning of segregation of ferrite and cementite and the
time for completing the eutectoid decomposition of austenite
and graphitization of eutectoid cementite was determined for
various temperatures ranging from 755 to 600°C by means of
a microscopic investigation of the hardened samples. The
position of the following lines was determined: of the be-

Card 1/2

SOV/21-58-10-10/27

The Eutectoid Transformation of Austenite in Malleable Cast Iron

ginning of eutectoid ferrite and carbide formation, of the end of eutectoid transformation and of the end of eutectoid carbide graphitization. The graph of isothermal transformation was plotted for austenite in malleable cast iron. There are 3 sets of photos, 1 graph and 5 references, 3 of which are Soviet, 1 Czech and 1 English.

ASSOCIATION: Institut chernoy metallurgii AN UkrSSR (Institute of Ferrous Metallurgy, of the AS UkrSSR)

SUBMITTED: April 26, 1958

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

1. Cast iron--Analysis
2. Austenite--Transformations
3. Cast iron--Phase studies
4. Cast iron--Test results

Card 2/2

BUNIN, K.P.; VOYTSELENOK, S.L.; FEDOROVA, S.A.

Eutectic transformation of austenite in malleable cast iron.

Lit. proizv. no.1:43-44 Ja '59.

(MIRA 12:1)

(Cast iron--Metallography)

REPORT BY S.H.

18(3)

SOV/21-59-10-13/26

AUTHOR: Bunin, K.P., Corresponding Member of the AS UkrSSR,
I.P. Horlova and S.A. Fedorova

TITLE: The Kinetics of the Second Stage of Graphitization
of Cast Iron in Repeated Annealing

PERIODICAL: Dopovidi Akademiyi nauk Ukrayins'koyi RSR, 1959, Nr 10,
pp 1106-1109 (USSR)

ABSTRACT: The author conducted experiments using the data of
experiments carried out by Reder and Wilson [Ref 1],
in order to compare the speeds of the second stage of
cast iron graphitization in the first and repeated an-
nealing, as well as the contradictory data obtained in
this respect by G.F. Tikhonov [Ref 2]. The result of
this study is that the eutectoid transformation of aus-
tenite into graphite and ferrite is accelerated in repea-
ted annealing (which confirms the data of Reder and
Wilson). This acceleration may be explained by the for-

Card 1/3



SOV/21-59-10-13/26

The Kinetics of the Second Stage of Graphitization of Cast Iron
in Repeated Annealing

mation of numerous pores in the matrix on the dissolution of graphite and on austinitizing during the repeated heating of cast iron up to a temperature of 950°C. There is much data, showing that the kinetics of graphitization is not controlled by the diffusion of carbon but by the processes of evacuation of matrix atoms. Therefore, in a porous matrix which is notable for an increased concentration of vacuums, and, consequently, for a higher self-diffusion rate, the increase in graphite will be speeded up. The acceleration of graphitization in the third, fourth, fifth and sixth annealing is defined in the paper of Reder and Wilson and may be connected with the additional formation of vacuums which appear in a cyclic processing of alloys containing graphite. From the data of Reder and Wilson and from that of the authors, it may be concluded that the lines of the diagram of

Card 2/3

SOV/21-59-10-13/26

The Kinetics of the Second Stage of Graphitization of Cast Iron
in Repeated Annealing

isothermic transformation of austenite in cast irons
[Ref 13,14] Will change depending on the initial
state of the samples. There is 1 graph, and 14 re-
ferences, 8 of which are Soviet, 3 English, 2 French
and 1 unidentified.

ASSOCIATION: Instytut chornoyi metalurhiyi AN URSR (Institute of
Ferrous Metallurgy of the AS UkrSSR).

SUBMITTED: April, 1, 1959

Card 3/3

FEDOROVA, S. A.

S/021/60/000/002/008/010
A158/A029

AUTHORS: Bunin, K.P., Corresponding Member of the AS UkrSSR; Horlova, I.P.;
Fedorova, S. A.

TITLE: Kinetics of Eutectoid Transformation of Austenite^{1%} in Gray Laminated-
Graphite Cast Irons

PERIODICAL: Dopovidi Akademiyi nauk Ukrayins'koyi Radyans'koyi Sotsialistychnoyi
Respubliki, 1960, No. 2, pp. 188 - 191

TEXT: This is a contribution to the study of the kinetics of isothermal
decomposition of austenite into graphite and ferrite, differing as to the content
of silicon. The authors established the beginning of eutectoid graphite, ferrite
and carbide formation from eutectoid austenite, the lines of the end of eutectoid
transformation and the lines of the end of eutectoid carbide graphitization. Sub-
jected to the experimental study were three cast iron grades of the following

chemical compositions:

	C	Si	Mn	S	P
1)	2.9%	1.30%	0.12%	0.009%	0.12%
2)	2.94%	2.73%	0.10%	traces	traces
3)	2.92%	4.00%	0.09%	traces	0.1%

Card 1/4

S/021/60/000/002/008/010
A158/AC29

Kinetics of Eutectoid Transformation of Austenite in Gray Laminated Graphite Cast Irons

The two first cast iron grades were molten from "Armko"-iron, electrode graphite and silicon metal in a 40-kg induction furnace. Samples 60 mm in diameter and 150 mm long were cast into preheated sand molds. The third cast iron grade was molten in a high-frequency МВН-3М (MVP-3M) furnace and was crystallized in chromomagnesium crucibles in the form of samples 55 mm long and 30 mm in diameter. Cast samples were cut into 8 - 10 mm thick disks which were subsequently used for the preparation of 8 x 8 x 8 mm samples. Thermal treatment was done in two furnaces: one for austenization, the other for isothermal soaking in an overcooled state. Temperatures and times of austenization were different: 1 - 880°C and 1½ h for cast iron No. 1; 2 - 930°C and 1½ h for cast iron No. 2 and 3 - 980°C and ½ h for cast iron No. 3. After soaking the samples were cooled (at a rate of 0.5°C per min) to the upper boundary of the interval of the stable eutectoid equilibrium (760°C for the first cast iron, 820°C for the second and 900°C for the third). Then the samples were transferred into a thermostat furnace, cooled therein to a temperature below the above mentioned upper boundary, seasoned for a while and hardened in water. In the case of low-stability auste-

Card 2/4

S/021/60/000/002/008/010
A158/A029

Kinetics of Eutectoid Transformation of Austenite in Gray Laminated Graphite Cast Irons

nite temperatures the samples were first cooled in smolten salts (22.5% of NaCl + 77.5% of CaCl₂). The results of the experiments are shown graphically in graphs Nos. 1, 2 and 3 (respectively for the first, second and third cast iron grade). Lines 68 (BV) show the beginning of the formation of graphite, lines 40 (DO) the beginning of the separation of the eutectoid ferrite and lines EM (EM) the beginning of the formation of the eutectoid iron carbide. Lines IMP (IMR) characterize the time required for the completion of the eutectoid decomposition of austenite. Lines MH (MN) indicate the time required for the completion of the graphitization of the eutectoid iron carbide. The results have shown that an increase in the content of silicon sharply raises the speed of decomposition of austenite into ferrite and graphite, the formation of iron carbide and the graphitization of the eutectoid iron carbide. This great influence of the content of silicon is explained by a speed-up of the growth of graphite and a widening of the front of its formation, caused by an increase in the content of graphite, accompanying an increased concentration of silicon. Consequently, the speed of formation of graphite in gray cast irons at subcritical temperatures is controlled

Card 3/4

S/021/60/000/002/008/010
A158/A029

Kinetics of Eutectoid Transformation of Austenite in Gray Laminated Graphite
Cast Irons

rather by the processes of separation of atoms of the matrix away from the front of the formation of graphite, than by the diffusion of carbon. This conclusion is in agreement with the findings achieved by J. Romey, R. Lafont and L. Abel (Ref. 9), and by P. Laurent and M. Fonderie (Ref. 10). There are 3 figures and 12 references: 7 Soviet, 1 Polish and 4 English. ✓

ASSOCIATION: Instytut chornoyi metalurgiyi (Institut of Ferrous Metallurgy) of the AS UkrSSR

PRESENTED: June 22, 1959

Card 4/4

BUNIN, K.P.; GORLOVA, I.P.; FEDOROVA, S.A.

Investigating the kinetics of eutectoid transformations in cast
iron. Idt.proizv. no.7:18-20 Je '60. (MIRA 13:7*
(Cast iron--Metallography)

FEDOROVA, S.A., kand.tekhn.nauk

Microscopy of the eutectoid transformation in magnesium-modified
cast iron. Trudy Inst.chern.met.AN URSR no.14:133-142 '61.

(MIRA 14:10)

(Cast iron--Metallography) (Phase rule and equilibrium)

BUNIN, K.P.; FEDOROVA, S.A.; ~~FEDOROVA, I.P.~~

Eutectoid transformation of austenite in phosphorus-bearing
grey cast irons. Dop. AN URSR no.10:1295-1299 '61.

(MIRA 14:11)

1. Institut chernoy metallurgii AN USSR. 2. Chlen-korrespondent
AN USSR (for Bunin).

(Austenite)

(~~Cast~~ iron--Metallurgy)

FEDOROVA, S.A., kand.tekhn.nauk

Causes of the microstructural heterogeneity in magnesium-modified
and malleable cast iron. Trudy Inst. chern. met. AN URSR 18:
121-130 '62. (MIRA 15:9)

(Cast iron--Metallography)

BUNIN, K.P.; DOLINSKAYA, V.Z. [Dolins'ka, V.Z.]; FEDOROVA, S.A.

Effect of vanadium on the kinetics of eutectoid transformation of
austenite in grey cast irons. Dop. AN URSR no.51607-609 '63.
(MIRA 1719)

1. Institut chernoy metallurgii AN UkrSSR. 2. Chlen-korrespondent
AN UkrSSR (for Bunin).

FEDOROVA, S.G.

The early Russian settlements in Alaska. Let. Sev. 4:97-113 '64.
(MIRA 18:3)

1. Gosudarstvennyy istoricheskiy muzey.